

ACCESS MANAGEMENT GROUP REVIEW DESCRIPTIONS

Access Management Group

Access Management examines the potential safety and capacity impacts that new or expanding traffic generations may have on the state roadway system and provides recommendations based on analysis of the impacts. Recommendations may range from denying access to recommending a development construct additional travel lanes. Other recommendations may also include access restrictions, internal traffic pattern operations, or installing new traffic signals to minimize the traffic impact and to facilitate traffic flow.

Listed below are brief descriptions of the various types of reviews that the Access Management Group may be requested to do.

DEVELOPMENT IMPACT & COMPREHENSIVE TRAFFIC STUDIES

Development Traffic Impact Analyses

The primary responsibility of the Access Management Group is the review of major development access and its potential impact on the State of North Carolina's streets and highways. Due to the number of active TIP (Transportation Improvement Program) projects and a development's desire to access highly visible and highly traveled thoroughfares, an increasing emphasis is being placed on the evaluation of a development's potential traffic impact to the existing roadway systems.

Each development review requires extensive background research, a comprehensive trip generation and distribution analysis, capacity analyses, queuing analyses, and an evaluation of both internal and external traffic flow. Due to the magnitude of the developments typically reviewed, preliminary signal warrants analysis, field inspections, traffic counts, and recommendations concerning the need for additional traffic controls are often needed. Interaction with both private development and field staff representatives is required to coordinate necessary geometric improvements as well as coordination with future TIP and thoroughfare improvements. All recommendations are coordinated with Division, District, and Regional Traffic Engineering staff, as well as local municipalities, if and when necessary.

The actual amount of effort and resources needed to complete a Development Traffic Impact Analysis is a function of the size of the development, number of proposed access connections, number of affected State maintained streets and intersections, amount and type of adjacent development(s), volume of traffic on adjacent streets, availability of accurate engineering information, the presence and status of active roadway improvement projects, and the political sensitivity associated with the development.

In addition to performing traffic impact studies for developments statewide, the group is responsible for reviewing and validating consultant-prepared traffic impact studies.

Comprehensive Traffic Studies

These are full scale investigations that involve significant data collection, reduction, and analysis(es) to develop appropriate recommendations. Due to the amount of research and report preparation required, it is not unusual for these studies to require several months to complete. The majority of these reviews involve a segment or corridor analysis(es) that includes virtually all traffic safety and traffic operation aspects including: capacity, crash analyses, origin and destination, delay, trip generation and distribution, and facility geometrics.

(Examples: Pinehurst O&D, NC 68 Corridor, US 29 Corridor, US 70 Corridor, US 301 Corridor)

CROSSOVER IMPACT ANALYSES AND REVIEW

In support of the NCDOT's "*Median Crossover Spacing Policy for North Carolina Streets and Highways*," the Access Management Group is responsible for investigating requests for median breaks on existing divided facilities associated with new development. Typically, these requests involve major retail or industrial developments and complex issues with respect to traffic safety and operations.

A Crossover Impact Study involves all of the analyses typical to a Development Impact Study, but also includes future consideration of future facility needs and critical crossover spacing factors. Evaluation of a potential crossover site requires a field investigation and consideration of all geometric, operational, and safety features.

Due to the traffic operations and safety, land value, and legal implications of granting median breaks; the studies must be thorough and unbiased. Any recommendation must be clearly justifiable from a traffic safety and operations perspective.

ENCROACHMENT REVIEWS

At the request of the Design Services Unit or the Roadway Design Branch, major development plans may be forwarded to the Access Management Group for traffic related recommendations. These requests amount to a formal plan review and, as such, the time required to complete will vary with the complexity and length of the project. Typical reviews involve traffic related recommendations concerning intersection design, control, capacity, access treatments, sight distance, horizontal and vertical alignments, and various other traffic engineering design principles.

CONTROL-OF-ACCESS AND RIGHT-OF-WAY INVESTIGATIONS

Each month, the Access Management Engineer represents the Traffic Engineering Branch on the Control-of-Access (C/A) and Right-of-Way (R/W) Abandonment Committee. In cooperation with the Federal Highway Administration (FHWA) and Managers of other North Carolina Department of Transportation (NCDOT) Branches, investigations are made into public and private sector requests for modifications to access

control and highway right-of-way. Each of these requests involves researching the site, collecting relevant traffic data, and submitting a recommendation based on the traffic safety and operational factors presented. All related requests typically evolve around traffic operations and safety issues. Therefore, most decisions made by this committee are based on the review/evaluation and recommendations of the Access Management Engineer. In order to provide this committee with quantitative and defensible information to base their recommendations, significant time, research and evaluation of the traffic issues associated with each request is required.

COURT CASES

Based on requests from the North Carolina Attorney Generals Office, NCDOT Legal Section, the Access Management Group is often requested to provide assistance with specific transportation litigation. A major portion of this assistance is in the form of data collection, evaluation, analysis, interpretation and preparing court exhibits. Court exhibits, used to illustrate specific traffic operations or property impacts, must be prepared to assist the NCDOT legal team when presenting technical information in a manner that can be clearly understood and conveyed to a jury. Often, members of the Access Management Group are requested to discuss technical issues with the NCDOT legal team to ensure the exhibits accurately reflect their legal position. The Access Management staff, at the request of the Attorney Generals Office, often provides expert testimony on behalf of the NCDOT on many of the transportation court cases. Therefore, significant preparation time (confirming project information, design standards, checking exhibits for accuracy and pre-trial meetings with the legal team) is required prior to actual testimony.

SPECIAL

In defense of General Statutes 136-18(5) and 136-93, the Access Management Group is responsible for the preparation, distribution, modification, and technical support of the NCDOT's "*Policy on Street and Driveway Access to North Carolina Highways.*" Additionally, the group is responsible for handling access related inquiries statewide as well as on a nationwide basis.

This section also provides municipalities, private engineering firms, and Division and District offices with interpretations and access treatments outlined in the Driveway Manual.

In order to keep abreast of nationwide access management trends, a significant amount of ongoing research is required. When necessary, revisions are made to the current access policy and changes are submitted for NCDOT approval.

The Access Management Group assists in the evaluation and validation of traffic related software and procedures. Frequently, the staff of the Access Management Group is called upon for FHWA capacity related concerns. Ongoing efforts to update current

FHWA Capacity Manual procedures are being followed by this group to keep Traffic Engineering Branch personnel apprised of any changes.

(Examples: Recent Petroleum Marketer's manual Revisions, Administrative Code Revisions, Kehler Access Legal Precedent, HCM Software Evaluation, *AutoTrack* Software Evaluation, *Synchro* Software Evaluation, Driveway Manual Update, Access Management Study, Town of Woodfin Roundabout)